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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCESIn re Application of
Van Ee et al.Attorney Docket
PH23,409

Serial No.: 09/217,414

Group Art Unit: 2126

Filed: December 21, 1998

Examiner: Ho, T.

Title: CLUSTERING OF TASK-ASSOCIATED OBJECTS FOR EFFECTING
TASKS AMONG A SYSTEM AND ITS ENVIRONMENTAL DEVICESHonorable Commissioner of Patents and Trademarks
Washington, DC 20231APPLICANT'S BRIEF ON APPEAL

Sir:

A Notice of Appeal having been faxed on March 25, 2004, the following is Applicant's
Brief:

(1) Real Party in Interest

The real party in interest is the assignee, U.S. Philips Corporation, a Delaware Corporation. Koninklijke Philips Electronics N.V., a corporation of The Netherlands, is the ultimate parent of Serial No. 09.217,414.

(2) Related Appeals and Interferences

There are no appeals or interferences known to the appellant or the assignee which will directly be affected by or have a bearing on the Board's decision in this appeal.

(3) Status of Claims

This appeal is from the decision of the Examiner dated December 12, 2003, finally rejecting claims 1-30 which are all the claims now pending in this application.

(4) Status of Amendments

An amendment was not filed after the final rejection of December 12, 2003.

(5) Summary of Invention

The present invention is directed to tasking systems supporting user interfaces for displaying objects, the displayed objects enabling user access to resources that provide for effecting tasks among the system and devices of the systems' environment (e.g., VCR, DVD, etc). Referring to Figure 1, an embodiment is illustrated of an implementing mechanism 100 (e.g., remote control unit). The implementing mechanism 100 comprises various resources for effecting tasks among a tasking system and environmental devices, based on object selection(s). The implementing mechanism 100 includes tasking system software 116 which is coupled with processing facilities 102 to run thereon. The tasking system software 116 supports clustering operations respecting such objects so as to enhance effecting of the associated tasks, such clustering operations, both adaptively and dynamically.

(6) Issues

The issues presented include whether Claims 1-6, 10-15, 17-27 and 30 are properly rejected under 35 U.S.C. 103 as being obvious in view of U.S. Patent No. 6,288,716 to Humpleman et al. Further, whether claims 7-9, 16, and 28-29 are properly rejected under 35 U.S.C. 103 as being obvious over U.S. Patent No. 6,288,716 to Humpleman et al. in view of U.S. Patent No. 6,130,726 to Darbee.

(7) Grouping of Claims

For the purpose of this appeal, claims 1-16 stand or fall together, controlled by independent Claim 1. Claims 17-20 stand or fall together, controlled by independent Claim 17. Independent Claims 21-26 each stand by themselves. Claims 27-30 stand or fall together, controlled by independent Claim 27.

(8) Arguments

Issue Whether independent Claims 1, 17, and 21-27 are properly rejected under 35 USC Section 103 as being obvious in view of Humpleman et al. '716.

First Argument

Section 2142 of the M.P.E.P. states the following:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 UPSQ2d 1438 (Fed. Cir. 1991).

Applicants submit that the rejection is improper because the prior art must teach or suggest all of the claim limitations. Claim 1 recites "the cluster formulation subsystem formulates clusters...such formulation being responsive to context" and "the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to context". Therefore, both the cluster formulation subsystem and the cluster presentation subsystem are responsive to context. The Examiner states that the cluster formulation subsystem is responsive to context (Final Office Action, page 3, line 2), but does not address the limitation that the cluster presentation subsystem is also responsive to context since Humpleman et al. '716 does not disclose this limitation. Therefore, all of the limitations of Claim 1 are not taught or suggested by Humpleman et al. '716.

Claim 17 recites "formulating clusters responsive to said context relevancy" and "presenting a plurality of said task-associated objects ...being context relevant". Therefore, the same argument would apply. Claim 21-27 recite "the cluster formulation subsystem formulates clusters...said cluster formulation being responsive to said context" and "the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context". Also, the same argument would apply.

Second Argument

As stated on pages 2-3 of the Final Office Action, Humpleman et al. '716 is described as teaching the following:

...a tasking software system (a mechanism, line 14 column 2) includes a state tracking subsystem (ICON variation representing a particular state of the home device, line 28-29 column 10) supports (provide, line 38 column 10) context determination (particular state, line 38, column 10), a cluster formulation subsystem (software and/or hardware saving the particular steps taken by a user while interacting, line 18-19 column 22) formulates clusters (macro, line 30 column 21), being responsive (macro generation 1204, Fig. 15) to context (session manager...saved states into actions, lines 8-11 column 15), a cluster presentation subsystem (the home device's macro list, line 39 column 22) supports (is saved as, line 38, column 22) the formatting and presentation of task-associated objects (macro file 1210, Fig. 15) of an active cluster (macro name button, line 40-41 column 22)...

Claim 1 recites: "the state tracking subsystem supports context determination; the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, such formulation being responsive to context..." Applicants are consistently using the term "context" to indicate the same meaning throughout the claim.

When addressing the state tracking subsystem clause of Claim 1, the Examiner views Humpleman et al. '716 as teaching that "context" as the term is used in the sentence "the state tracking subsystem supports context determination" is the particular state of the device (column 10 line 38 of Humpleman et al. '716) (see Final Office Action, page 2, paragraph 3, lines 9-12). Looking to Humpleman et al. '716 reference, it clarifies that "state" means, for example, that a DVCR is rewinding, playing, etc. (Col. 10, lines 26-39) Therefore, the Examiner has defined "context" as meaning whatever the condition of the particular device (i.e., DVD, VCR, DVCR, etc.) is currently in.

However, when discussing the cluster formulation subsystem clause of Claim 1 ("the cluster formulation subsystem formulates clusters...such formulation being responsive to

context”), the Examiner states “a cluster formulation subsystem (software and/or hardware saving the particular steps taken by a user while interacting, line 18-19 column 22) formulates clusters (macro, line 30 column 21), being responsive (macro generation 1204, Fig. 15) to context (session manager ...saved states into actions, lines 8-11 column 15)” (see Final Office Action, bottom of page 2 to top of page 3). As discussed in columns 14 and 15 of Humpleman et al. ‘716, the session manager 750 causes the home devices to communicate with each other and may allow for the saving of states of the home devices. Therefore, in addressing the cluster formulation subsystem clause’s use of the term “context” the Examiner defines it as the “session manager” – which is capable of saving states, but is not a state itself.

In summary, Applicants respectfully submit that the Examiner is using two different definitions of the term “context” as used in Claim 1 when making the rejection. The first definition in discussion of the state tracking subsystem clause, context is defined by the Examiner as the state of a device; in the second definition in the cluster formulation, context is defined as the session manager itself which is capable of saving states, but is not a state itself. The Applicants have used context throughout Claim 1 to have the same meaning; in his rejection, the Examiner has chosen two separate elements of Humpleman et al. ‘716 to anticipate one element of Claim 1. This is not permissible. (See M.P.E.P. Section 2131, under 25 U.S.C. Section 102, “[t]he elements must be arranged as required by the claim, but this is not an ipsissimis verbit test, i.e. identity of terminology is not required.” In re Bond, 15 USPQ2d 1566 (Fed. Cir. 1990)). Therefore, in performing an element-by-element anticipation analysis, In re Bond does not allow the same element of a reference to be used in two different ways to meet different elements of the claim.

Claim 17 recites “tracking the state of a plurality of environmental devices to determine context relevancy; formulating clusters responsive to said context relevancy, each cluster comprising selected task-associated objects”. The term context is also used consistently and, therefore, the same argument as above would apply. Claims 21-27 recite “the state tracking subsystem supports context determination” and “the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context”. Therefore, the same argument as above would apply.

Third Argument

Claim 1 recites “a cluster formulation subsystem formulates clusters, each cluster comprising selected objects, such formulation being responsive to context”.

Humpleman et al. '716 in column 21, lines 64-67 and column 22, lines 1-10, states the following:

For example, FIG. 15 depicts the creation of a preset macro 1200 according to one embodiment of the invention. As depicted in FIG. 15, when a create macro button 1202 on a respective HTML page of a home device is selected, a macro generation process 1204 begins to execute. Execution of the macro generation process 1204 causes a set of user selected device parameter values 1208, selected from the home device's parameter list 1206, to be saved to a macro file 1210. The file 1210 is assigned a unique macro name 1212 and saved on the home device. The macro name 1212 is saved as a macro name button on the home device's macro list HTML page 1214. Thereafter, a user may select the macro name button, causing the respective macro file 1210 to be executed.

Humpleman et al. '716 disclose that the “macro generation process 1204” and execution of the macro file 1210 are both initiated (or “selected”) by the operator. However, in the Examiner's Final Office Action, he states in referring to Humpleman et al. '716 “a cluster formulation subsystem (software and/or hardware saving the particular steps taken by a user while interacting, line 18-19 column 22) formulates clusters (macro, line 30, column 21), being responsive (macro generation 1204, Fig. 15) to context (session manager...saved states into actions line 8-11 column 15)” (see Final Office Action, bottom of page 2 to top of page 3). Therefore, Applicants respectfully submit that Humpleman's “cluster formulation” is not responsive to “context” but rather to operator initiated action.

Claim 17 recites “formulating clusters responsive to said context relevancy” and therefore, the same arguments would apply. Claims 21-27 recite “the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context” and, therefore, the same arguments would apply.

Fourth Argument

Claim 1 further recites “...the cluster presentation subsystem supports the formatting and presentations of task-associated objects of an active cluster responsive to context”.

The Examiner states “a cluster presentation subsystem (the home device's macro list, line 39, column 22) supports (is saved as, line 38, column 22) the formatting and presentation of task-

associated objects (macro file 1210, Fig. 15) of an active cluster (macro name button, line 40-41, column 22)" (see page 3, lines 3-6 of the Final Office Action). The Examiner is identifying macro file 1210 as the "task-associated objects". The Examiner further goes on to state that "Humbleman does not explicitly disclose objects of a cluster. However, Humpleman disclose in 804 of Figure 10 several objects that the user can interact with (channel, brightness...). It would have been obvious to consider this teaching as objects of a cluster wherein after the user clicks on the one of the object, a task that is specified to that object would be performed." (Final Office Action, page 3, lines 19-21 to page 4, lines 1-2). The Examiner is stating in his rejection that 1) there are objects (macro file 1210) of a cluster (macro name button, line 40-41 column 22) and 2) there are not objects present in Humpleman et al. '716, but it would have been obvious to consider 804 in Figure 10 as containing objects. Reviewing the Examiner's first position, the Applicants assert that Humpleman et al. '716 teach that the macro name button is just the name for the macro file 1210 and they are the same element of the reference. Attention is again drawn to the requirement of In re Bond that the anticipatory reference must have "elements arranged as required by the claim". Therefore, In re Bond negates using the same elements of Humpleman et al. '716 in two different ways to anticipate separate elements of Claim 1. (Further, the elements that make up the macro file 1210 are Parameter Values which are not presented to the user during operation, and, therefore, would not meet the limitation of Claim 1 regarding "presentations of task-associated objects of an active cluster responsive to context").

Reviewing the Examiner's second position regarding obviousness of objects of the cluster. First, Applicants respectfully submit that the rejection is improper because the motivation to modify Humpleman et al. '716 is not clear from the reference nor from the Examiner's statements. Under MPEP 2142, "[w]hen the motivation to combine the teachings of the references is not immediately apparent, it is the duty of the examiner to explain why the combination of the teachings is proper. *Ex parte Skinner*, 2 USPQ2d 1788 (Bd. Pat. App. & Inter. 1986)."

Applicants respectfully submit that the Examiner's statement that "[i]t would have been obvious to consider this teaching" does not provide a proper motivation to make a modification of Humpleman et al. '716. Therefore, the requirement that the Examiner make a *prima facie* case has not been met. Second, the Applicants submit that the Examiner is using impermissible

hindsight in modifying Humpleman et al. '716. There is no teaching or motivation in Humpleman et al. '716 to modify the clusters to include objects. As stated in MPEP 2143.01, the "fact that the claimed invention is within the capabilities of one of ordinary skill in the art is not sufficient by itself to establish *prima facie* obviousness."

Claim 17 recites "presenting a plurality of task-associated objects via display facilities, each task-associated object corresponding to each of said plurality of environmental devices and being context relevant", and, therefore, the same argument as above would be applicable. Claims 21-27 recite "the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context", and, therefore, the same argument as above would be applicable.

Fifth Argument

Claim 21 further recites "the cluster formulation subsystem reformulates said clusters based on changes in said context". On page 4, lines 3-6 of the Final Office Action, the Examiner states "Humpleman as modified further discloses the cluster formulation subsystem reformulates (712 is selected, line 5 column 16, and 712 is deactivated, line 8 column 16) the clusters (804, Fig. 10), responsive to context (selection by the user, line 11-12 column 16). First, on page 3, line 20 of the Final Office Action, 804 of Figure 10 was identified as containing "several objects that the user can interact with (channel, brightness...)." The Examiner has changed his terminology to calling reference numeral 804 "clusters". Again, calling attention to In re Bond, the same element (in this case 804) cannot be used to anticipate multiple, different elements of a claim. Second, the Examiner has identified the cluster formulation subsystem as macro generation 1204 as shown in Figure 15 (bottom of page 2 and top of page 3 of the Final Office Action). The Examiner then combines Figure 10 with Figure 15 to obtain an anticipation of the reformulation step of Claim 21. If the Examiner is going to combine Figures 10 and Figure 15, which are different embodiments, the Examiner should provide an obviousness analysis with the appropriate motivation statement. Third, Claim 21 reformulates based on changes in context. Reference numeral 712 of Humpleman et al. '716 is a selection by the user as the Examiner points out rather than a change in context. (The Examiner appears to be

defining context as a "selection by the user" on page 4 of the Final Office Action; however, the Examiner already identified context as "the particular state" of the device on page 2, paragraph 3, lines 9-12 of the Final Office Action). The Examiner cannot change the definition of context at a later point in a rejection to meet another limitation. Therefore, the Applicants submit that Humpleman et al. do not disclose reformulating based on context, but rather by operator selection.

Sixth Argument

Claim 22 further recites "a mechanism positioning system for determining the environment position of the implementing mechanism, said mechanism positioning system recognizing changes in the environment of the implementing mechanism, and said mechanism positioning system contributing to the determination of said context for the tasking software system." On page 4 of the Final Office Action, the Examiner states that Humpleman '716, as modified, "further discloses the state tracking subsystem supports context determination by gathering data (several variations, line 26 column 10) respecting (representing, line 28 column 10) at least one of environmental, device, system and temporal states (particular state of the home device, line 28-29 column 10)." Applicants submit that discussion of the state of the device as discussed in column 10 of Humpleman et al. does not meet the limitation in Claim 22 of "environment position of the implementing mechanism". This limitation is not taught or suggested by the prior art of record.

Seventh Argument

Claim 23 further recites "said context determination including detecting changes in ambient physical conditions". "Ambient" is defined by Webster's College Dictionary, 2000 to mean "1. of the surrounding area or environment". Therefore, the limitation indicates the physical conditions external and surrounding the mechanism. It is respectfully submitted that Humpleman et al. '716 do not teach or suggest this limitation.

Eighth Argument

Claim 24 recites "wherein said context determination includes using at least one algorithm capable of changing a context determination". It is respectfully submitted that Humpleman et al. '716 do not teach or suggest this limitation.

Ninth Argument

Claim 25 recites "wherein said context determination includes monitoring historical usage patterns of a user." It is respectfully submitted that Humpleman et al. '716 do not teach or suggest this limitation.

Tenth Argument


Claim 26 recites "said cluster formulation operating substantially continuously". It is respectfully submitted that Humpleman et al. '716 do not teach or suggest this limitation.

Conclusion

It is respectfully urged that the rejection of all claims is erroneous and that all claims are allowable. Wherefore, it is respectfully requested the decision of the Examiner finally rejecting Claims 1-30 be reversed in all respects.

Respectfully submitted,

Date: May 25, 2004

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Appendix

Claim 1. An implementing mechanism, providing for effecting tasks associated with user selection of task-associated objects, and being associated with an environment, the environment comprising one or more environmental devices, the implementing mechanism comprising:

resources including user interface facilities supporting display of task-associated objects, communication facilities enabling communication with environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated object; and

a tasking software system including a state tracking subsystem, a cluster formulation subsystem, a cluster presentation subsystem and a transition subsystem, wherein

the state tracking subsystem supports context determination;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, such formulation being responsive to context;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to context; and,

the transition subsystem supports transitions among formats/presentations of an active cluster;

the tasking software system operating in coordination with the resources so as to display, via the display facilities and responsive to context, clusters of task-associated objects and, by selection of any such object, to enable a user to activate a task respecting one or more environmental devices.

Claim 2. The implementing mechanism as claimed in Claim 1, wherein the cluster formulation subsystem re-formulates the clusters, repsonsive to context, and on an adaptive and dynamic basis.

Claim 3. The implementing mechanism as claimed in Claim 1, wherein the cluster presentation subsystem supports the formatting and presentation of objects, responsive to context and on an adaptive and dynamic basis.

Claim 4. The implementing mechanism as claimed in Claim 1, wherein the transition subsystem supports transition among clusters as to active status.

Claim 5. The implementing mechanism as claimed in Claim 1, wherein the state tracking subsystem supports context determination by gathering data respecting at least one of environmental, device, system and temporal states.

Claim 6. The implementing mechanism as claimed in Claim 1, wherein the user interface comprises a graphical user interface.

Claim 7. The implementing mechanism as claimed in Claim 1, wherein the tasking software system further comprises at least one of an object discovery subsystem and a help subsystem.

Claim 8. The implementing mechanism as claimed in Claim 7, wherein the object discovery subsystem supports the discovery of environmental devices.

Claim 9. The implementing mechanism as claimed in Claim 7, wherein the object discovery subsystem supports an introduction function, such function enabling communication of "get-to-know-me" information with environmental devices.

Claim 10. The implementing mechanism as claimed in Claim 1, further comprising collateral software, the collateral software enabling at least one of (a) user recognition and authentication, (b) acquisition and processing of data on ambient environmental states, and (c) acquisition and processing of data respecting the determination of the implementing mechanism's physical position in its environment.

Claim 11. The implementing mechanism as claimed in Claim 1, wherein the tasking software system comprises distribution facilities, the distribution facilities providing for distribution of one or more functions and operations of the tasking software system and its subsystems over, between or among one or more of a first implementing mechanism, additional implementing mechanisms, one or more environmental devices, one or more other external computing devices, other computer system(s) and network resources.

Claim 12. The implementing mechanism as claimed in Claim 1, wherein the resources and tasking software system coordinate so as to support tasking of the implementing mechanism by the user selection of objects as displayed the display facilities or by one or more environmental devices.

Claim 13. The implementing mechanism as claimed in Claim 12, wherein the resources and tasking system coordinate so as to enable the implementing mechanism to emulate one or more environmental devices.

Claim 14. The implementing mechanism as claimed in Claim 1, wherein a task-associated object comprises a macro object, such macro object, if selected, being enabled to change a state of one or more environmental devices.

Claim 15. The implementing mechanism as claimed in Claim 1, wherein a macro object is user defined or system-created from user usage patterns.

Claim 16. The device of claim 8, wherein the tasking system is distributed over the device and an external digital processing device.

Claim 17. A method implemented on an implementing mechanism comprising the steps of:
tracking the state of a plurality of environmental devices to determine context-relevancy;

formulating clusters responsive to said context-relevancy, each cluster comprising selected task-associated objects;

presenting a plurality of said task-associated objects via display facilities, each task-associated object corresponding to each of said plurality of environmental devices and being context relevant;

selecting a task-associated object; and

executing the one or more tasks associated with the selected task-associated object while maintaining context-relevancy of the presented task-associated objects.

Claim 18. The method of claim 17, wherein the tracking step comprises:

polling the plurality of environmental devices to determine, based on response, a current state of the plurality of environmental devices; and

updating the presented objects to evidence the so-determined current state.

Claim 19. The method of claim 17, wherein the executing step comprises:

transmitting a signal to one of said plurality of environmental devices instructing it to change state or implement a set of instructions to effect a change in state; and

updating the presented task-associated objects to reflect the object selection, so as to maintain context-relevancy of the presented objects.

Claim 20. The method of claim 19, further comprising receiving information from at least one of said environmental devices, so as to determined, based thereon, the physical location of the implementing mechanism, and updating the presentation of task-associated objects based on the so-determined physical location.

Claim 21. An implementing mechanism comprising:
resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;
a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein
the state tracking subsystem supports context determination;
the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context, and the cluster formulation subsystem reformulates said clusters based on changes in said context;
the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster based on changes in said context; and
the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of environmental devices.

Claim 22. An implementing mechanism comprising:
resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;
a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein
the state tracking subsystem supports context determination;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context;

the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of devices; and

a mechanism positioning system for determining the environment position of the implementing mechanism, said mechanism positioning system recognizing changes in the environment of the implementing mechanism, and said mechanism positioning system contributing to the determination of said context for the tasking software system.

Claim 23. An implementing mechanism comprising:

resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;

a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein

the state tracking subsystem supports context determination, said context determination including detecting changes in ambient physical conditions;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster based on changes in said context; and

the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by

selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of said environmental devices.

Claim 24. An implementing mechanism comprising:

resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;

a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein

the state tracking subsystem supports context determination, wherein said context determination includes using at least one algorithm capable of changing a context determination;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context; and

the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of environmental devices.

Claim 25. An implementing mechanism comprising:

resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;

a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein

the state tracking subsystem supports context determination, wherein said context determination includes monitoring historical usage patterns of a user;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context; and

the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of environmental devices.

Claim 26. An implementing mechanism comprising:

resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;

a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein

the state tracking subsystem supports context determination;

the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context and said cluster formulation subsystem operating substantially continuously;

the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context; and

the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of environmental devices.

Claim 27. An implementing mechanism comprising:
resources including user interface facilities supporting a display of task-associated objects, communication facilities enabling communication with at least one of a plurality of environmental devices and supporting the TCP/IP connective standard, display facilities enabling display of task-associated objects, and input facilities enabling user selection of task-associated objects;
a tasking software system including a state tracking subsystem, a cluster formulation subsystem, and a cluster presentation subsystem, wherein
the state tracking subsystem supports context determination;
the cluster formulation subsystem formulates clusters, each cluster comprising selected objects, said cluster formulation being responsive to said context;
the cluster presentation subsystem supports the formatting and presentation of task-associated objects of an active cluster responsive to said context; and
the tasking software system operating in coordination with the resources to display via the display facilities and responsive to said context, clusters of task-associated objects and, by selection of any said task-associated object, to enable a user to active a task respecting at least one of said plurality of environmental devices.

Claim 28. The implementing mechanism of claim 27, further comprising:
a help subsystem supporting interaction with the tasking software system.

Claim 29. The implementing mechanism of claim 28, wherein the help subsystem is configured to support user interaction with the tasking software system by analyzing user's configuring preferences against at least one of said existing clusters and identifying conflicts between said user's configuring preferences and at least one of said existing clusters.

Claim 30. The implementing mechanism of claim 27, wherein said display facilities include a touch-sensitive LCD.